

AMENDMENTS

In the Claims:

Claim 1 (Currently Amended) A computer program product for program level message traffic interception comprising:

a computer-readable medium;

~~a protocol-independent API core module stored on the medium, the API core module having an array of predetermined rules for intercepted message traffic; and~~

a display device for displaying a graphical user interface for receiving data indicative of a user-selected type of an event and data indicative of at least one user-selected operation to be performed on the message if the user-selected type of event occurs;

an interface communication emulator module for translating an incoming message from an interface into a translated message in a standard format and for communicatively coupling transmitting the protocol-specific program level translated message; and traffic to the API core.

a protocol-independent API core module stored on the medium, the API core module configured to receive the translated message, determine what type of an event has occurred based upon the contents of the translated message, and perform the at least one user-selected operation on the message based upon the user-selected type of event.

Claim 2 (Original) The computer program product of claim 1 further comprising a message database communicatively coupled to the API core module, the message database further comprising an array of message properties for each message.

Claim 3 (Original) The computer program product of claim 2 wherein the array of message properties further comprise message interpretation data.

Claim 4 (Original) The computer program product of claim 2 wherein the array of message properties further comprise message formatting data.

Claim 5 (Original) The computer program product of claim 2 wherein the array of message properties further comprise message routing data.

Claim 6 (Original) The computer program product of claim 2 wherein the array of message properties further comprise message default values.

Claim 7 (Original) The computer program product of claim 2 wherein the array of message properties further comprise message transmission rules.

Claim 8 (Original) The computer program product of claim 2 wherein the array of message properties further comprise enable-lockout combination data.

Claim 9 (Original) The computer program product of claim 2 wherein the array of message properties further comprise limits on message field values.

Claim 10 (Original) The computer program product of claim 2 wherein the array of message properties further comprise message field units.

Claim 11 (Original) The computer program product of claim 2 wherein the array of message properties further comprise user-defined identifiers.

Claim 12 (Original) The computer program product of claim 2 wherein the array of message properties further comprise interface information.

Claim 13 (Currently Amended) The computer program product of claim 2 further comprising a scenario module communicatively coupled to the message database, the scenario module further comprising state machine emulation definition, the definition providing ~~event-driven parameters responsive to message traffic~~ a plurality of available operations from which the user selects the user-selected operation.

Claim 14 (Currently Amended) The computer program product of claim 13 wherein ~~the event-driven parameters~~ one of the plurality of available operations discriminates between a plurality of received translated messages based on a message identification parameter.

Claim 15 (Currently Amended) The computer program product of claim 13 wherein ~~the event-driven parameters~~ one of the plurality of available operations discriminates between a plurality of received translated messages based on a message contents parameter.

Claim 16 (Currently Amended) The computer program product of claim 13 wherein ~~the event-driven parameters~~ one of the plurality of available operations discriminates between a plurality of received translated messages based on a message occurrence parameter.

Claim 17 (Currently Amended) The computer program product of claim 13 wherein ~~the event-driven parameters~~ one of the plurality of available operations discriminates between a plurality of received translated messages based on a message frequency parameter.

Claim 18 (Currently Amended) The computer program product of claim 13 where ~~the event-driven parameters~~ one of the plurality of available operations discriminates between a plurality of received translated messages based on a count of the number of times an event's parameters have been satisfied.

Claim 19 (Currently Amended) The computer program product of claim 13 wherein ~~the event-driven parameters~~ one of the plurality of available operations discriminates between a plurality of received translated messages based on a comparison with variables.

Claim 20 (Currently Amended) The computer program product of claim 13 wherein ~~an event defined by the event-driven parameters~~ one of the plurality of available operations modif[y]ies the contents of [[a]] the translated message.

Claim 21 (Currently Amended) The computer program product of claim 13 wherein ~~an event defined by the event-driven parameters~~ one of the plurality of available operations routes [[a]]the translated message.

Claim 22 (Currently Amended) The computer program product of claim 13 wherein ~~an event defined by the event-driven parameters~~ one of the plurality of available operations deletes [[a]] the translated message.

Claim 23 (Currently Amended) The computer program product of claim 13 wherein ~~an event defined by the event-driven parameters~~ one of the plurality of available operations controls other events based on the translated message.

Claim 24 (Currently Amended) The computer program product of claim 13 wherein ~~an event defined by the event-driven parameters~~ one of the plurality of available operations performs calculations based on the translated message.

Claim 25 (Currently Amended) The computer program product of claim 13 wherein ~~an event defined by the event-driven parameters~~ one of the plurality of available operations controls user displays based on the translated message.

Claim 26 (Currently Amended) The computer program product of claim 13 wherein ~~an event defined by the event-driven parameters~~ one of the plurality of available operations extracts at least one value from [[a]]the translated message.

Claim 27 (Currently Amended) The computer program product of claim 13 wherein ~~an even defined b-y the event-driven parameters~~ one of the plurality of available operations creates and sends an arbitrary message defined in the message database.

Claim 28 (Currently Amended) The computer program product of claim 13 wherein ~~an event defined by the event-driven parameters~~ one of the plurality of available operations transforms ~~an incoming~~ the translated message into a different message defined in the message database.

Claim 29 (Original) The computer program of claim 13 wherein the ~~actions~~ operations triggered by an event provide logical branching, looping, iteration, and internal or external subroutine calling capability.

Claim 30 (Currently Amended) The computer program product of claim 13 wherein the ~~communications interface~~ communication emulator module is communicatively coupled to the scenario execution module which is communicatively coupled to the message database, and the interface communication emulator module receives the incoming message whereby messages are received, reformat~~[[ted]]~~s the incoming message into the translated message which is a message database compliant structure and an outbound message~~[[s]]~~ generated by the scenario module ~~[[are]]~~is passed back to the communications interface emulator module for protocol-specific transmissions.

Claim 31 (Original) The computer program product of claim 13 further comprising a post-test data analysis capability wherein recorded data may be analyzed, abstracted, and displayed in a variety of text and graphical formats.

Claim 32 (New) A system for program level message traffic interception, comprising:

a first interface configured to receive and transmit messages;

a second interface configured to receive and transmit messages;

a testing device intermediate to the first and second interfaces, the testing device comprising logic configured to receive from a user, via a user interface, test scenario data indicative of parameters describing a test to be performed on messages received from the first or second interface, the parameters comprising user-selected event data describing an event that may occur during the transmission of messages between the first and second interface, the parameters further comprising user-selected operation data indicative of at least one operation to be performed if the event occurs, the logic further configured to receive a first message in a first specific protocol from one of the first or second interfaces, translate the received message from its first specific protocol into a translated message in a standard protocol, determine if the event has occurred based on contents of the translated message and the user-selected event data, and perform the operation if the logic determines that the event has occurred based on the user-selected operation data.

Claim 33 (New) The system for program level message traffic interception of claim 32, wherein the operation to be performed comprises transmitting a second message, based on the first message, to the other one of the first or second interfaces.

Claim 34 (New) The system for program level message traffic interception of claim 33, wherein the logic is further configured to translate the translated message into the second message in a second specific protocol.

Claim 35 (New) The system for program level message traffic interception of claim 32, wherein the event is dependent upon a message identification, contents of the message, occurrence of the message, frequency of the type of the message, parameter satisfaction count, or comparison with variables.

Claim 36 (New) The system for program level message traffic interception of claim 32, wherein the operation may comprise modifying the translated message contents, routing an outgoing message based on the translated message to an interface, deleting the translated message, controlling other events, performing calculations, controlling the user interface, extracting message values, or reading data from a file.